

Notice of AllowabilityApplication No. **10/040,953**Applicant(s) **TEIG ET AL.**Examiner **Andrea Liu**Art Unit **2825****-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 21 November 2003 Amendment by Applicants.
2. ☒ The allowed claim(s) is/are 27-64.
3. ☒ The drawings filed on 05 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. <u>101403, 111903, 121003</u> | <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Mani Adeli on 22 March 2004 and 22 April 2004.

1) Claim 27: line 7, delete --possibilities-- and insert "permutations";
line 10, delete --possibilities-- and insert "permutations";

2) Claim 28: line 2, delete --to optimize--;

3) Claim 29: line 2, delete --possibilities-- and insert "permutations";

4) Claim 30: line 3, delete --possibilities-- and insert "permutations";
line 6, delete --possibilities-- and insert "permutations";
line 8, insert --and-- after semicolon;

5) Claim 31: line 3, delete --possibilities-- and insert "permutations";
line 9, insert --and-- after semicolon;

Art Unit: 2825

6) Claim 34: line 2, delete --possibilities-- and insert “permutations”;

line 3, delete --possibilities-- and insert “permutations”;

line 4, insert --and-- after semicolon;

line 7, delete --possibilities-- and insert “permutations”;

7) Claim 48: line 9, delete --possibilities-- and insert “permutations”;

line 12, delete --possibilities-- and insert “permutations”;

line 12, insert --and-- after semicolon;

8) Claim 49: line 3, delete --to optimize--;

9) Claim 50: line 6, delete --possibilities-- and insert “permutations”;

line 9: insert --and-- after semicolon;

10) Claim 51: line 9: insert --and-- after semicolon.


Art Unit: 2825

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claims 27-64 are allowed. The primary reason for allowance is the inclusion of the steps of solving the LP problem to propagate permutations of routes into the second set of smaller sub-regions within a method and computer readable medium involved in propagating the routes wherein a router hierarchically defines routes for nets within a region of a design layout, the router partitioning the region into a first set of sub-regions and for each particular net identifying a route that traverses a set of the first-set sub-regions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Andrea Liu 
Patent Examiner

(571) 272-1901



**VUTHE SIEK
PRIMARY EXAMINER**